

March 11, 2002

Mr. Darryl Frazier  
Metal Prep, Inc.  
720 Vincennce Street  
New Albany, Indiana 47150

Dear Mr. Frazier:

Re: Exempt Construction and Operation Status,  
**043-15346-00055**

The application from Metal Prep, Inc., received on March 4, 2002, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following paint stripping operation, to be located at 95 East 18<sup>th</sup> Street in New Albany, Indiana 47150, is classified as exempt from air pollution permit requirements:

- (a) one (1) metal stripping tank, identified as (Strip Tank), with a maximum design capacity of 1680 gallons, utilizing TEC STRIP 208 at a maximum rate of 75 gallons per year, and
- (b) one (1) rust inhibitor tank, identified as (Rust Inhibitor Tank), with a maximum design capacity of 600 gallons, utilizing ROST-VETO 4222S at a maximum rate of 100 gallons per year.

There are no applicable requirements associated with this source.

This exemption is the first air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original Signed by Paul Dubenetzky  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

SDF

cc: File - Floyd County  
Floyd County Health Department  
Air Compliance - Ray Schick  
Permit Tracking - Janet Mobley  
Technical Support and Modeling - Michele Boner  
Compliance Data Section - Karen Nowak

## **Indiana Department of Environmental Management Office of Air Quality**

### **Technical Support Document (TSD) for an Exemption**

#### **Source Background and Description**

Source Name: Metal Prep, Inc.  
Source Location: 95 East 18<sup>th</sup> Street in New Albany, Indiana 47150  
County: Floyd  
Exemption No.: 043-15346-00055  
Permit Reviewer: SDF

The Office of Air Quality (OAQ) has reviewed an application from Metal Prep, Inc. relating to the construction and operation of their proposed metal stripping operation.

#### **Request**

On March 4, 2002, Metal Prep, Inc. submitted an application to construct and operate a metal stripping operation. Metal Prep, Inc. will be stripping paint off steel and iron parts and treating the stripped metal with a rust inhibitor.

The modification consists of:

- (a) one (1) metal stripping tank, identified as (Strip Tank), with a maximum design capacity of 1680 gallons, utilizing TEC STRIP 208 at a maximum rate of 75 gallons per year, and
- (b) one (1) rust inhibitor tank, identified as (Rust Inhibitor Tank), with a maximum design capacity of 600 gallons, utilizing ROST-VETO 4222S at a maximum rate of 100 gallons per year.

#### **Existing Approvals**

This proposed exemption is the first approval for the source.

#### **Recommendation**

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application.

An application for the purposes of this review was received on March 4, 2002.

#### **Emission Calculations**

##### **1. Unrestricted Potential to Emit (UPTE):**

The proposed source consists of one strip tank and one rust inhibitor tank. The following calculations determine the emissions from these units.

**a. Strip Tank:**

TEC Strip 208 is utilized in the strip tank. TEC Strip 208 consists of sodium hydroxide (NaOH) which is neither a VOC nor a HAP. Thus, there are no regulated pollutant emissions associated with this tank.

**b. Rust Inhibitor Tank:**

ROST-VETO 4222S is utilized in the rust inhibitor tank. ROST-VETO 4222S consists of mineral oils, dipropylene glycol methyl ether, and triethanolamine. All three compounds are volatile organic compounds (VOC). Only triethanolamine is a regulated HAP.

The following calculations determine the rust inhibitor tank VOC and HAP unrestricted potential to emit (UPTE) based on use of the ROST-VETO 4222S rust inhibitor, its specified density, a maximum annual usage rate of 100 gallons per year, a maximum VOC fraction of 0.71, a maximum HAP fraction of 0.01, and emissions before controls.

VOC:  $7.71 \text{ lb/gal} * 0.71 * 100 \text{ gal/yr} * 1/2000 \text{ ton/lb} = 0.27 \text{ tons VOC/yr}$

HAP:  $7.71 \text{ lb/gal} * 0.01 * 100 \text{ gal/yr} * 1/2000 \text{ ton/lb} = 0.003 \text{ tons HAP/yr}$

**2. Emissions After Controls:**

The source emissions are uncontrolled. Therefore, the emissions after controls equal the emissions before controls.

VOC:  $7.71 \text{ lb/gal} * 0.71 * 100 \text{ gal/yr} * 1/2000 \text{ ton/lb} = 0.27 \text{ tons VOC/yr}$

HAP:  $7.71 \text{ lb/gal} * 0.01 * 100 \text{ gal/yr} * 1/2000 \text{ ton/lb} = 0.003 \text{ tons HAP/yr}$

**Potential To Emit**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

The following table lists the source PTE.

Pollutant	Potential To Emit (tons/year)
PM	-
PM-10	-
SO <sub>2</sub>	-
VOC	0.27
CO	-
NO <sub>x</sub>	-

HAP's	Potential To Emit (tons/year)
Triethanolamine	0.003
TOTAL	0.003

The worst case single and combined HAP emissions are less than their respective exempt levels of 1 and 2.5 tons per year, and the VOC emissions are less than its exempt level of 10 tons per year. Therefore, the source qualifies for an Exemption pursuant to 326 IAC 2-1.1-3(d)(1).

### County Attainment Status

The source is located in Floyd County.

Pollutant	Status
PM-10	attainment or unclassifiable
SO <sub>2</sub>	attainment or unclassifiable
NO <sub>2</sub>	attainment or unclassifiable
Ozone	maintenance attainment
CO	attainment or unclassifiable
Lead	attainment or unclassifiable

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Floyd County has been designated as maintenance attainment for ozone. Therefore, the VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Floyd County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

### Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Unit	PM (tons/yr)	PM10 (tons/yr)	SO <sub>2</sub> (tons/yr)	NO <sub>x</sub> (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Single HAP (tons/yr)	Comb HAPs (tons/yr)
Source	-	-	-	-	0.27	-	0.003	0.003

PSD Levels	250	250	250	250	250	250	-	-
Part 70 Levels	-	100	100	100	100	100	10	25

- (a) This new source is not a major PSD stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more and it is not one of the 28 listed source categories.
- (b) This new source is not a Title V major stationary source because no criteria pollutant potential to emit (PTE) exceeds the applicable level of 100 tons/yr, no single hazardous air pollutant PTE exceeds the applicable levels of 10 tons/yr, and the combined hazardous air pollutant PTE does not exceed the applicable level of 25 tons/yr.

## **Part 70 Permit Determination**

### **326 IAC 2-7 (Part 70 Permit Program)**

The proposed source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

## **Federal Rule Applicability**

### **1. New Source Performance Standards (NSPS)**

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this source.

### **2. National Emission Standards for Hazardous Air Pollutants (NESHAP)**

40 CFR Part 63, Subpart T (Halogenated Solvent Cleaning) does not apply to the paint stripper because the cleaner used by the stripper tank is not one of the solvents listed in 40 CFR §63.460.

40 CFR Part 63, Subpart T does not apply to the rust inhibitor tank because the tank is a rust inhibitor coating unit, not a degreasing unit.

## **State Rule Applicability - Entire Source**

### **2. 326 IAC 2-4.1-1:**

326 IAC 2-4.1-1 (New Source Toxics Rule) does not apply to the source because the potential to emit of a single HAP of each applicable unit is less than 10 tons per year and the combination HAPs of each unit is less than 25 tons per year.

### **2. 326 IAC 2-6:**

326 IAC 2-6 (Emission Reporting) does not apply to the source because the VOC emissions are less than the applicable level of 10 tons per year.

## **State Rule Applicability (Individual Facilities)**

### **1. 326 8-3 (Organic Solvent Degreasing Operations):**

The proposed stripper tank is not subject to any 326 IAC 326 IAC 8-3 requirements because the tank cleans parts utilizing a sodium hydroxide solution, not an organic solvent.

None of the 326 IAC 8-3 requirements apply to the rust inhibitor tank because the unit is a rust inhibitor application unit, not a degreaser.

**2. 326 IAC 8-7:**

326 IAC 8-7 does not apply to the proposed rust inhibitor tank because the tank potential VOC emissions are less than the applicable rate of 10 tons per year and the source VOC emissions are less than the applicable rate of 100 tons per year.

326 IAC 7 does not apply to the paint stripper tank because the tank does not emit VOC emissions.

**3. 326 IAC 8-1-6: (State BACT Requirements):**

Although no other Article 8 rules apply, 326 IAC 8-1-6 does not apply because:

- (a) the stripper unit does not generate VOC emissions, and
- (b) the potential VOC emissions from the rust inhibitor application tank are less than the applicable level of 25 tons per year.

**Conclusion**

The proposed paint stripping operation shall be constructed and operated according to the requirements specified in **Exemption 043-15346-00055**.